THE ADVISORY COMMISSION ON ACCESSIBLE INSTRUCTIONAL MATERIALS IN POSTSECONDARY EDUCATION FOR STUDENTS WITH DISABILITIES
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DECISION POINTS FOR THE TECHNOLOGY TASK FORCE

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Guiding Principle:

Technology developed or deployed to facilitate access to instructional materials must permit a user with a print disability the opportunity to acquire the same information, engage in the same transactions and enjoy the same services as the user without a disability, and with a substantially equivalent ease of use.

File format issues

1. The Technology Task Force does not recommend the establishment of a NIMAS-standard file format as part of the solution to accessibility issues in higher education.
2. The Technology Task Force recommends document characteristics as criteria for satisfying their acceptability as source documents to be provided by content owners. Examples of these characteristics include, at a minimum, the provision of:
   - Text format as opposed to image format;
   - Major heading structures;
   - Page breaks;
   - Page numbers;
   - Properly structured information presented in table format
   - Brief descriptive text for images, charts, and graphs; and a logical reading order.

   The taskforce recognizes that the commercial distribution of accessible materials will greatly reduce the need for parties other than the student with a disability to handle the files. This will reduce the

cost and improve the timely delivery of materials to students. However, the taskforce also recognizes a need to provide some recommendations related to source files for the near term.

In addition, we recommend that producers of courseware management systems, Web development software, word processors, and layout programs, among others, be encouraged to create accessibility wizards and prompts that inspect materials for accessibility as they are created and before they are distributed to students.

(rationale: Source files with these characteristics can then be used to create student ready materials with most commonly available assistive technologies; understanding that complex, post-source file markup may be required for the production of some student-ready files depending on end format requirements. It is also possible that these source files may be student-ready as-is, which is preferable.)

3. The Technology Task Force recommends investment be made in corollary checklists and/or automated tools for verifying compliance with the accessibility requirements for source files.
4. The Technology Task Force recognizes that DRM is necessary to protect publishers' intellectual property and copyrights. However, the use of the DRM protection (in both hardware and software) must permit a user with a print disability the opportunity to acquire the same information as the user without a disability, and with an equivalent ease of use.
5. The Technology Task Force recognizes the need to make Science, Technology, Engineering and Math (STEM) content accessible to students with disabilities. We recommend that when posted to Web sites, included in courseware management systems, or as part of e-Pub documents, STEM materials containing equations and/or scientific notation be made available to students with disabilities in an accessible form (images of equations alone will not suffice), such as MathML. Electronic copy of books from publishers should also include text-based equations in formats such as MathML (preferred) or LaTeX.

Repository issues

1. The Technology Task Force recommends against the establishment of a centralized file repository along the lines of the NIMAC, to meet the accessibility needs of higher education.
2. The Technology Task Force recommends the establishment of a federated search entity that enables individual students and DSS offices to search a single online resource to find all accessible materials from all sources.
3. The Technology Task Force recommends solutions that will permit the sharing of accessibility-enhanced instructional material files directly among and between organizations producing these accessible materials – including existing and future authorized entities and institutions of postsecondary education – so long as such sharing complies with all laws, regulations, and requirements, then in place, to protect all rights of the copyright holders.
4. The Technology Task Force recommends the establishment of accessibility metadata standards (and require support for them) to make the discovery of accessible materials easier.